

REMARKS

Claims 1-6, 9-18, 23-28, 34-37, and 43 are pending. Of these, claims 1, 10, 23, 34, 36, and 43 are independent. Claims 7, 8, 19-22, 29-33, and 38-42 were previously canceled without prejudice or disclaimer of the subject matter therein. Claims 37 and 43 are amended herein.

Allowable Subject Matter

Applicants acknowledge the Examiners indication that claims 4 and 16 contain allowable subject matter and would be allowable if rewritten in independent form to include the features of their respective base claims. However, Applicants respectively submit that the base claims are in a condition for allowance, for at least the reasons set forth below.

Rejections under 35 U.S.C. § 103(a)

U.S. Patent No. 5,643,342 to Andrews

The Office Action rejected claims 1-3, 5, 6, 9-15, 17, 18, 23-28, and 34-36 as being unpatentable over U.S. Patent No. 5,643,342 to Andrews. Andrews discloses a fuel pellet for burning in either a stoker or pulver furnace. The fuel pellet includes from about 0 to about 80% by weight of cellulosic material, from about 20% to about 50% by weight of densified thermoplastic material, and from about 0 to about 50% by weight of coal. Andrews, Abstract. All the particles are in particulate form and have been ground to particle sizes of at least 80 mesh and as fine as 200 mesh. Andrews, column 4, lines 14-17. The particles are blended into a mixture, and then a fuel pellet is formed through compaction to its size of about 1/2 to 3/4 inch in diameter and about 3/4 inch to 3 inches in length. Andrews, column 3, lines 54-58. Upon introduction to the stoker or pulver

furnace, the pellet breaks into its discrete particles and burns. Andrews, column 5, lines 20-21.

However, Applicants submit that the teachings of Andrews do not establish a *prima facie* case of obviousness with respect to independent claims 1, 10, 23, 34, and 36. To establish a *prima facie* case of obviousness, three basic criteria must be met. One of these three criteria requires that the prior art reference teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991); see M.P.E.P. § 2143.

Applicants submit that Andrews does not establish a *prima facie* case of obviousness at least because Andrews does not teach or suggest all the features of the claimed invention. For example, independent claims 1 and 10 each include the feature that “at least 90% by weight of the fuel composition fed into a burner is combusted in less than 10 seconds.” Likewise, independent claim 23 recites the method step of “combusting at least 90% by weight of said fuel composition fed into the burner in less than 10 seconds.” Independent claims 34 and 36 each recite a fuel composition including an “instantaneously combusting fossil fuel.” As described in the specification, an “instantaneously combusting fuel” is a fuel which includes the combustion of at least 90% by weight of the fuel material fed into a burner in less than 10 seconds. See Specification, page 3, lines 35-38.

Andrews does not teach or suggest a fuel composition or method for combusting at least 90% by weight of a fuel composition fed into a burner in less than 10 seconds. The Office Action states that because “Andrews teaches that the fuel pellet breaks into discrete particles as it enters the furnace and burns,” and because “smaller particles within the pellet are capable of burning quicker due to their size and density,” the

claimed feature is obvious. See Office Action, page 3. Applicants respectfully traverse the Office's conclusion.

First, Andrews teaches that its fuel pellets are formed through compaction to a size of about 1/2 to 3/4 inch in diameter and about 3/4 inch to 3 inches in length. See Andrews, column 3, lines 54-58. However, Andrews is silent about the combustion time period. Applicants submit that one skilled in the art working with Andrews would understand that at least the "combusting at least 90% . . . in less than 10 seconds" limitation is neither taught nor suggested. Fuel pellets such as those taught in Andrews are discussed in the background section of the Specification. The Specification describes systems that dry, grind, and agglomerate matter into granules. The Specification states that virtually complete combustion of the granules takes at least one full minute, and perhaps longer. See Specification, page 2, line 29 - page 3, line 5. Indeed, owing to their dimensions, the agglomerated fuel materials simply cannot be used to feed "instantaneous-combustion burners." Specification, page 3, lines 6-14; page 6, line 15-page 7, line 10.

Though the Office Action states that the fuel pellets disclosed in Andrews break down into discrete particles to enhance combustion times, there is no indication in Andrews that the combustion times approach the combustion rate claimed in each of independent claims 1, 10, 23, 34, and 36. Therefore, Andrews does not teach or suggest all the features of the claimed invention. For example, it does not teach or suggest, explicitly or implicitly, "combusting at least 90% . . . in less than 10 seconds," as recited in independent claims 1, 10, and 23, and as claimed by the recitation "instantaneously combustible fuel," in independent claims 34 and 36. Consequently,

independent claims 1, 10, 23, 34, and 36 should be allowable over Andrews. Applicants respectfully request that the Examiner withdraw the rejection of these claims.

Claims 2, 3, 5, 6, 9, 11-15, 17, 18, 24-28, and 35 depend from and add additional features to independent claims 1, 10, 23, and 34. Accordingly, these claims should be allowable for at least the reasons that the associated independent claims are allowable.

JP 62051676 to Sato

The Office Action rejected claims 37 and 43 as being unpatentable over JP 62051676 to Sato. Relying upon In re Young, 25 U.S.P.Q. 69 (CCPA 1935), the Office Action declined to consider the fuel composition recited in the preamble as imparting patentability to the claims. See Office Action, page 4.

By this Reply, Applicants amend claims 37 and 43 to recite a system including a fuel composition comprising at least one instantaneously combusting fossil fuel, and at least one instantaneously combusting non-fossil fuel selected from the group consisting of urban solid waste, elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof. Accordingly, the claimed fuel composition is an element of the system and must be given patentable weight. Sato fails to teach or suggest any system having all the claimed features, including the recited fuel composition. Accordingly, claims 37 and 43 should be allowable over Sato. Applicants respectfully request that the Examiner withdraw the rejection of these claims.

Conclusion

In view of the foregoing amendments and remarks, Applicants submit that claims 1-6, 9-18, 23-28, 34-37, and 43 are in a condition for allowance. Therefore, Applicants respectfully request that the Examiner withdraw the rejections and allow the claims. In

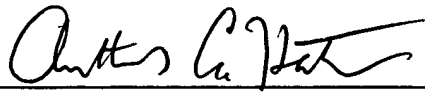
addition, Applicants respectfully request the Examiner consider the references cited in the Information Disclosure Statement and PTO SB/O8 filed concurrently herewith.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account no. 06-0916.

Respectfully submitted,

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